nearly six times as broad as high; it is from 60–70 (more exactly 58–66) mm. in diameter, by 10–12 mm. in height. It is very firm in consistency, like cartilage. The exumbrella (fig. 1, fig. 4, right half) is divided by a broad, very deep coronal furrow (*ec*) into a central umbrella disk and a peripheric umbrella corona. The corona surrounds the disk as a wall does a fortress, or an atoll, a circular zone of coral reefs, does the island it encloses, from which it is separated by a ring of lagoons. The central disk ("discus umbralis," *uc*) is flat, smooth, circular, and gelatinous; its radius is nearly twice as great as the breadth of the umbrella corona, and therefore amounts to two-thirds of the whole radius of the umbrella. Its margin is divided by 19 to 22 radial indentations or incisions ("sulci radiales," *es*) into the same number of notches or teeth. These notches of the disk are quadrangular, 5 mm. broad and nearly as long; their height at the external perpendicular fall into the "mural ditch" amounts to 8 mm. The teeth lie in the same radii as the rhopalar pedalia (*uo*); they alternate with the tentacular pedalia (*ut*), which correspond to the radial furrows between the teeth.

The exumbral coronal furrow ("fossa circularis," *ec*) in *Atolla* is so deep, that in its fundus the central umbrella disk is only connected with the peripheric umbrella corona by a very thin gelatinous ring (fig. 4, *ec'*). Its depth amounts to 6-7 mm.; its greatest breadth (in the lower third) to 4 mm. It resembles a circle of lagoons, which separates the central island from the surrounding atoll reef, or the deep ditch which separates the enclosed fortification from its circular wall. But as the teeth of the umbrella disk, project towards the outside with their upper edge over the mural ditch, like overhanging cliffs, the upper, cleft-shaped passage into the coronal furrow appears only 1–2 mm. broad.

The peripheric corona of the umbrella ("corona umbralis") is half as broad as the radius of the central umbrella disk, and is composed of three different zones: an inner zone of tentacular pedalia (*ut*), a middle zone of rhopalar pedalia (*uo*), and an outer zone of marginal lobes (*l*). The inner zone consists of from 19 to 22 gelatinous sockels of the tentacles ("pedalia tentacularia," *ut*). They are thick, almost dice-shaped gelatinous pieces, which lie close together and are only separated by shallow radial furrows. The lateral length of this gelatinous die amounts to nearly 6 mm. Each pedalium forms the basis or socket of a tentacle, which springs from its outer surface. On closer consideration we perceive the following conditions of form:—The upper (aboral) surface (fig. 1, *ut*) is smooth, arched rather convexly and hexagonal; of the six side lines of this hexagon, the inner are contiguous to the coronal furrow, and lies opposite the radial furrow (*es*) between each two adjacent teeth of the central disk (*er*). The two inner lateral lines of the hexagon are contiguous to the corresponding lateral lines of the two adjacent, whilst of the three external lines, the middle touches the tentacle basis, and the two outer lateral lie opposite the two adjacent rhopalar pedalia (*uo*). The lower (oral) surface of the tentacular pedalia has the form of a parallel trapeze, and forms the upper wall of a tentacular pouch. Their inverted lateral surfaces are separated by a radial